

ABSTRACT

The invention is intended to provide a high-capacity ultrasonic composite oscillating device that is sufficiently rigid as a composite oscillating body for various strong ultrasonic applications. One constructed such that BLTs (1,1', 2, 2', n, n') of the same characteristics are disposed around an outer peripheral portion of a disk-shaped oscillating body 4 in n-sets opposed to each other and disposed at regular intervals, opposed BLTs being driven in an opposite phase mode, and driven in an oscillating mode in which the phase between the BLTs in adjacent sets is shifted by π/n , and an oscillating rod connected to a center of the disk-shaped oscillating body is induced with a composite oscillation output of oscillation capacity n-times that of one set of BLTs induced in the center of the disk-shaped oscillating body 4, and one in which a plurality of these oscillating devices are jointed together to increase the oscillation capacity.